

## **ATTACHMENT G – GENERIC TOXICITY REDUCTION EVALUATION (TRE) WORKPLAN (POTW)**

### **1. Information and Data Acquisition**

#### **a. Operations and performance review**

- i. NPDES permit requirements
  - (1) Effluent limitations
  - (2) Special conditions
  - (3) Monitoring data and compliance history
- ii. POTW design criteria
  - (1) Hydraulic loading capacities
  - (2) Pollutant loading capacities
  - (3) Biodegradation kinetics calculations/assumptions
- iii. Influent and effluent conventional pollutant data
  - (1) Biochemical oxygen demand (BOD<sub>5</sub>)
  - (2) Chemical oxygen demand (COD)
  - (3) Suspended solids (SS)
  - (4) Ammonia
  - (5) Residual chlorine
  - (6) pH
- iv. Process control data
  - (1) Primary sedimentation - hydraulic loading capacity and BOD<sub>5</sub> and SS removal
  - (2) Activated sludge - Food-to-microorganism (F/M) ratio, mean cell residence time (MCRT), mixed liquor suspended solids (MLSS), sludge yield, and BOD<sub>5</sub> and COD removal
  - (3) Secondary clarification - hydraulic and solids loading capacity, sludge volume index and sludge blanket depth
- v. Operations information
  - (1) Operating logs
  - (2) Standard operating procedures
  - (3) Operations and maintenance practices
- vi. Process sidestream characterization data
  - (1) Sludge processing sidestreams
  - (2) Tertiary filter backwash
  - (3) Cooling water
- vii. Combined sewer overflow (CSO) bypass data
  - (1) Frequency
  - (2) Volume
- viii. Chemical coagulant usage for wastewater treatment and sludge processing
  - (1) Polymer
  - (2) Ferric chloride
  - (3) Alum

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- b. POTW influent and effluent characterization data**
  - i. Toxicity
  - ii. Priority pollutants
  - iii. Hazardous pollutants
  - iv. SARA 313 pollutants
  - v. Other chemical-specific monitoring results
- c. Sewage residuals (raw, digested, thickened and dewatered sludge and incinerator ash) characterization data**
  - i. EP toxicity
  - ii. Toxicity Characteristic Leaching Procedure (TCLP)
  - iii. Chemical analysis
- d. Industrial waste survey (IWS)**
  - i. Information on IUs with categorical standards or local limits and other significant non-categorical IUs
  - ii. Number of IUs
  - iii. Discharge flow
  - iv. Standard Industrial Classification (SIC) code
  - v. Wastewater flow
    - (1) Types and concentrations of pollutants in the discharge
    - (2) Products manufactured
  - vi. Description of pretreatment facilities and operating practices
  - vii. Annual pretreatment report
  - viii. Schematic of sewer collection system
  - ix. POTW monitoring data
    - (1) Discharge characterization data
    - (2) Spill prevention and control procedures
    - (3) Hazardous waste generation
  - x. IU self-monitoring data
    - (1) Description of operations
    - (2) Flow measurements
    - (3) Discharge characterization data
    - (4) Notice of sludge loading
    - (5) Compliance schedule (if out of compliance)
  - xi. Technically based local limits compliance reports
  - xii. Waste hauler monitoring data manifests
  - xiii. Evidence of POTW treatment interferences (i.e., biological process inhibition)

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